



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

October 30, 2003

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: General Motors Corporation- GMPTG - Bedford / 093-17902-00007

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-AM.dot 9/16/03



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October 20, 2003

Mr. John Thomas
General Motors Corporation - GMPTG-Bedford
105 GM Drive
Bedford, Indiana 47421

Re: 093-17902-00007
First Amendment to
SSM 093-13639-00007

Dear Mr. Thomas:

General Motors Corporation - GMPTG-Bedford was issued a permit on July 19, 2002 for the construction of four furnaces and the addition of emission limits to ensure PSD minor status. A letter requesting to add a hood stack and to make descriptive changes to the permit was received on August 29, 2003. Pursuant to the provisions of 2-7-11, the permit is hereby administratively amended as follows:

1. The source has requested to revise the description of furnace numbers 13, 14, and 18A to reflect the use of organic and inorganic flux when describing the maximum capacity of the units. Total flux usage is limited by permit condition D.3.2(d), and there is no physical or operational change in the method of operation of these units. The following changes were made to the permit in response to these requests:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

.....

- (b) One (1) new dry hearth furnace, identified as number 13, with a maximum heat input capacity of 10 million British thermal units per hour and a maximum ~~melt rate~~**capacity** of 2.08 tons of aluminum per hour **and one (1) pound of inorganic flux per ton of metal**, with emissions uncontrolled and exhausting to stack DH-13-1.
- (c) One (1) new dry hearth furnace, identified as number 14, with a maximum heat input capacity of 10 million British thermal units per hour and a maximum ~~melt rate~~**capacity** of 2.08 tons of aluminum per hour **and one (1) pound of inorganic flux per ton of metal**, with emissions uncontrolled and exhausting to stack DH-14-1.
- (d) One (1) new reverberatory furnace, identified as number 18A, with a maximum heat input capacity of 7 million British thermal units per hour and a maximum ~~melt rate~~**capacity** of 2.0 tons of aluminum per hour, **nine (9) pounds of inorganic flux per ton of metal, and two (2) pounds of organic flux per ton of metal**, with emissions uncontrolled and exhausting to stacks 261 and 264.



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SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

New Units

....

- (b) One (1) new dry hearth furnace, identified as number 13, with a maximum heat input capacity of 10 million British thermal units per hour and a maximum ~~melt rate~~**capacity** of 2.08 tons of aluminum per hour **and one (1) pound of inorganic flux per ton of metal**, with emissions uncontrolled and exhausting to stack DH-13-1.
- (c) One (1) new dry hearth furnace, identified as number 14, with a maximum heat input capacity of 10 million British thermal units per hour and a maximum ~~melt rate~~**capacity** of 2.08 tons of aluminum per hour **and one (1) pound of inorganic flux per ton of metal**, with emissions uncontrolled and exhausting to stack DH-14-1.
- (d) One (1) new reverberatory furnace, identified as number 18A, with a maximum heat input capacity of 7 million British thermal units per hour and a maximum ~~melt rate~~**capacity** of 2.0 tons of aluminum per hour, **nine (9) pounds of inorganic flux per ton of metal, and two (2) pounds of organic flux per ton of metal**, with emissions uncontrolled and exhausting to stacks 261 and 264.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

- 2. The source will be adding a hood stack to RF-11 over the charge door to help improve capture and collection of emissions during charging of the furnace. In addition, stack number 15 is incorrectly referenced as being located off this furnace, and the furnace is more correctly described as a "reverbatory furnace" instead of a "reverbatory holding furnace" as both holding and melting occur in RF-11. The following changes were made to the permit in response to these requests:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

Die Cast Melting

.....

- (I) One reverberatory ~~holding~~ furnace referred to as RF-11 and as DC MELT A - #11, constructed in 1974 with a maximum capacity of 5.1 tons of metal per hour and 7 pounds of inorganic flux per ton of metal, and a maximum heat input capacity of 20.4 million Btu per hour, with emissions uncontrolled and exhausting to stacks 55, 56, and ~~45~~**RF-11-HS**.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Die Cast Melting (existing unit)

. . . .

- (l) One reverberatory ~~holding~~ furnace referred to as RF-11 and as DC MELT A - #11, constructed in 1974 with a maximum capacity of 5.1 tons of metal per hour and 7 pounds of inorganic flux per ton of metal, and a maximum heat input capacity of 20.4 million Btu per hour, with emissions uncontrolled and exhausting to stacks 55, 56, and 45 **RF-11-HS**.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Mike Pring, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7840 to speak directly to Mr. Pring. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original Signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

ERG/MP

cc: File - Lawrence County
U.S. EPA, Region V
Lawrence County Health Department
Air Compliance Section Inspector - Dick Sekula
Compliance Data Section - Karen Ampil
Administrative and Development - Sara Cloe



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PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY

**General Motors Corporation - GMPTG - Bedford
105 GM Drive
Bedford, Indiana 47421**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 093-13639-00007, issued July 19, 2002	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	

First Permit Modification No.: 093-16935-00007 (Issued June 9, 2003) of Source Modification No. 093-13639-00007
Second Permit Modification No.: 093-16988-000007 (Issued September 16, 2003) of Source Modification No. 093-13639-000007

First Amendment No.: 093-17902-00007 of Source Modification No.: 093-13639-00007	Affected Pages: 5, 6, 30
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: October 30, 2003

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TABLE OF CONTENTS

SECTION A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
- A.4 Part 70 Permit Applicability [326 IAC 2-7-2]
- A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

SECTION B GENERAL CONSTRUCTION CONDITIONS

- B.1 Definitions [326 IAC 2-7-1]
- B.2 Effective Date of the Permit [IC13-15-5-3]
- B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]
- B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]
- B.5 Phase Construction Time Frame

SECTION C GENERAL OPERATION CONDITIONS

- C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]
- C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
- C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]
- C.4 Opacity [326 IAC 5-1]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Operation of Equipment [326 IAC 2-7-6(6)]
- C.7 Stack Height [326 IAC 1-7]
- C.8 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]
- C.9 Compliance Requirements [326 IAC 2-1.1-11]
- C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]
- C.12 Pressure Gauge and Other Instrument Specifications
- C.13 Compliance Response Plan - Preparation, Implementation, Records, and Reports
- C.14 Emergency Provisions
- C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
- C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)]
- C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

SECTION D.1 FACILITY OPERATION CONDITIONS - aluminum chip dryer

Emission Limitations and Standards

- D.1.1 Particulate Matter [326 IAC 6-3-2]
- D.1.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]
- D.1.3 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR 63, Subpart A]
- D.1.4 Secondary Aluminum Smelting NESHAP Requirements [40 CFR 63, Subpart RRR]
- D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.1.6 Control Device Operation
- D.1.7 Testing Requirements [326 IAC 2-7-6(1),(6)]
- D.1.8 Secondary Aluminum Smelting NESHAP Monitoring Requirements [40 CFR 63, Subpart RRR]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.1.9 Visible Emissions Notations
- D.1.10 Parametric Monitoring
- D.1.11 Broken or Failed Bag Detection

TABLE OF CONTENTS (Continued)

D.1.12 Baghouse Inspections

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.13 Record Keeping Requirements [40 CFR 63, Subpart RRR] [326 IAC 2-7-5(3)]
[326 IAC 2-7-19]

D.1.14 Reporting Requirements [40 CFR 63, Subpart RRR]

SECTION D.2 FACILITY OPERATION CONDITIONS - scrap metal crusher

Emission Limitations and Standards

D.2.1 Particulate Matter (PM)[326 IAC 6-3-2]

D.2.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

D.2.5 Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.6 Visible Emissions Notations

D.2.7 Parametric Monitoring

D.2.8 Dust Collector Inspections

D.2.9 Broken or Failed Cartridge Filter Detection

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.10 Record Keeping Requirements [40 CFR 63, Subpart RRR]

SECTION D.3 FACILITY OPERATION CONDITIONS - furnaces

Emission Limitations and Standards

D.3.1 Particulate Matter (PM) [326 IAC 6-3-2]

D.3.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.5 Record Keeping Requirements

D.3.6 Reporting Requirements

SECTION D.4 FACILITY OPERATION CONDITIONS - tool room boiler

Emission Limitations and Standards

D.4.1 Particulate Matter (PM) [326 IAC 6-2-3]

SECTION D.5 FACILITY OPERATION CONDITIONS - insignificant activities

Emission Limitations and Standards

D.5.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

TABLE OF CONTENTS (Continued)

- D.5.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]
- D.5.3 Particulate Matter [326 IAC 6-3-2]

Certification
Quarterly Reports

SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary aluminum die casting facility.

Responsible Official:	Plant Manager
Source Address:	105 GM Drive, Bedford, Indiana 47421
Mailing Address:	105 GM Drive, Bedford, Indiana 47421
General Source Phone Number:	812-279-7404
SIC Code:	3363 and 3365
County Location:	Lawrence
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source under PSD Rules Minor Source under Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

- (a) One (1) new dry hearth furnace, identified as number 10, with a maximum heat input capacity of 50 million British thermal units per hour and a maximum melt rate of 12.5 tons of aluminum per hour, with emissions uncontrolled and exhausting to stacks DH-10-1, DH-10-2, and DH-10-3.
- (b) One (1) new dry hearth furnace, identified as number 13, with a maximum heat input capacity of 10 million British thermal units per hour and a maximum capacity of 2.08 tons of aluminum per hour and one (1) pound of inorganic flux per ton of metal, with emissions uncontrolled and exhausting to stack DH-13-1.
- (c) One (1) new dry hearth furnace, identified as number 14, with a maximum heat input capacity of 10 million British thermal units per hour and a maximum capacity of 2.08 tons of aluminum per hour and one (1) pound of inorganic flux per ton of metal, with emissions uncontrolled and exhausting to stack DH-14-1.
- (d) One (1) new reverberatory furnace, identified as number 18A, with a maximum heat input capacity of 7 million British thermal units per hour and a maximum capacity of 2.0 tons of aluminum per hour, nine (9) pounds of inorganic flux per ton of metal, and two (2) pounds of organic flux per ton of metal, with emissions uncontrolled and exhausting to stacks 261 and 264.

Existing Units at the Source

The following emission units are already constructed and operating at the source. The Permittee has requested that this permit to construct and operate the new furnaces (as listed above) also

include conditions to limit emissions from the entire plant to less than PSD major source levels (i.e. less than 250 tons per year).

Chip Processing

- (e) One (1) aluminum chip dryer constructed in 1974, referred to as CHIP-2, with a maximum capacity of 5.85 tons of aluminum per hour and a maximum heat input capacity of 6.83 million Btu per hour, with emissions controlled by a baghouse and an afterburner AB-1 and exhausting to stack 10.

Aluminum Crushing

- (f) One (1) scrap metal crusher device, referred to as CRUSH, constructed in 1974 with a maximum crushing capacity of 37.5 tons of aluminum scrap per hour, with emissions controlled by a dust collector and exhausting to stack CRUSH-1.

Die Cast Melting

- (g) Two (2) electric induction furnaces, referred to as INDUCT-21, and INDUCT-22, constructed in 1977, each with a maximum capacity of 3.3 tons of aluminum per hour, controlled by a common venturi scrubber system VS-1 and exhausting to stack 14.
- (h) Three (3) electric induction furnaces, referred to as INDUCT-23, INDUCT-24, and INDUCT-25, constructed in 1981, each with a maximum capacity of 3.3 tons of aluminum per hour, controlled by a common venturi scrubber system VS-2 and exhausting to stack 15.
- (i) Two (2) electric induction furnaces, referred to as INDUCT-26 and INDUCT-27, both constructed in 1981, each with a maximum capacity of 3.3 tons of aluminum per hour, controlled by a common venturi scrubber system VS-3 and exhausting to stack 16.
- (j) One reverberatory holding furnace referred to as RF-2 and as DC MELT B - #2, constructed in 1999 with a maximum capacity of 6.25 tons of metal per hour and 0.1 pounds of inorganic flux per ton of metal, and a maximum heat input capacity of 25 million Btu per hour, with emissions uncontrolled and exhausting to stack 207.
- (k) One reverberatory melting furnace referred to as RF-3 and as DC MELT A - #3, constructed in 1974 with a maximum capacity of 3.4 tons of metal per hour and 7 pounds of inorganic flux per ton of metal, and a maximum heat input capacity of 20.4 million Btu per hour, with emissions uncontrolled and exhausting to stacks 67 and 68.
- (l) One reverberatory furnace referred to as RF-11 and as DC MELT A - #11, constructed in 1974 with a maximum capacity of 5.1 tons of metal per hour and 7 pounds of inorganic flux per ton of metal, and a maximum heat input capacity of 20.4 million Btu per hour, with emissions uncontrolled and exhausting to stacks 55, 56, and RF-11-HS.
- (m) One reverberatory melting furnace referred to as RF-12 and as DC MELT A - #12, constructed in 1996 with a maximum capacity of 10.0 tons of metal per hour and 7 pounds of inorganic flux per ton of metal and a maximum heat input capacity of 40.0 million Btu per hour, with emissions uncontrolled and exhausting to stacks 57, 58, and 17.
- (n) One reverberatory melting furnace referred to as RF-16 and as DC MELT A - #16, constructed in 1975 with a maximum capacity of 4.87 tons of metal per hour and 7 pounds of inorganic flux per ton of metal, and a maximum heat input capacity of 29.2 million Btu per hour, with emissions uncontrolled and exhausting to stacks 52, 53, and 16.

Piston Melting

- (o) One reverberatory melting furnace referred to as RF-13 and as PIST MELT - #13, constructed in 1996, with a maximum capacity of 1.08 tons of metal per hour and a maximum heat input capacity of 5.2 million Btu per hour, with emissions uncontrolled and exhausting to stack 294.
- (p) One reverberatory melting furnace referred to as RF-5 and as PIST MELT - #5, constructed in 1977 with a maximum capacity of 4.17 tons of metal per hour, 9 pounds of inorganic flux per ton of metal, 2 pounds of organic flux per ton of metal, and a maximum heat input capacity of 25 million Btu per hour, with emissions uncontrolled and exhausting to stacks 283 and 284.
- (q) One reverberatory melting furnace complex referred to as complex 6 and RF-6, consisting of two natural gas-fired reverberatory furnaces, constructed in 1999, with a maximum capacity of 5 tons of metal per hour and 0.1 pounds of inorganic flux per ton of metal, and with a combined maximum heat input capacity of 33 million Btu per hour, with emissions uncontrolled and exhausting to stacks 6-1, 6-3, and charge well stacks 6-2 and 6-4.
- (r) One reverberatory melting furnace referred to as RF-7 and as PIST MELT - #7, constructed in 1976 with a maximum capacity of 6.6 tons of metal per hour, 9 pounds of inorganic flux per ton of metal, 2 pounds of organic flux per ton of metal, and a maximum heat input capacity of 39.6 million Btu per hour, with emissions uncontrolled and exhausting to stacks 275 and 276;
- (s) One reverberatory melting furnace referred to as RF-17 and as PIST MELT - #17, constructed in 1977 with a maximum capacity of 4.3 tons of metal per hour, 9 pounds of inorganic flux per ton of metal, 2 pounds of organic flux per ton of metal, and a maximum heat input capacity of 25.8 million Btu per hour, with emissions uncontrolled and exhausting to stacks 263 and 260.
- (t) One reverberatory melting furnace referred to as RF-19 and as PIST MELT - #19, constructed in 1978 with a maximum capacity of 4.67 tons of metal per hour, 9 pounds of inorganic flux per ton of metal, 2 pounds of organic flux per ton of metal, and a maximum heat input capacity of 28 million Btu per hour, with emissions uncontrolled and exhausting to stacks 287 and 288.
- (u) One (1) natural gas-fired boiler referred to as the POWER - tool room boiler, constructed in 1966 with a maximum heat input capacity of 10.05 million Btu per hour with emissions uncontrolled and exhausting to stack 30 which has a height of 50 feet.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment:
 - (1) grinding and machining operations;

- (2) chip and crushed material storage piles;
- (3) sniff units;
- (4) EDM carbon etchers, tool sharpening, and abrasive cleaning;
- (5) small sand blasters;
- (6) refractory powder mixing station;
- (7) clipper brick saw;
- (8) feed hopper and conveyor for induction furnaces;
- (9) dross presses;
- (10) ladle weigh station;
- (11) die cast machines and associated small holding furnaces;
- (12) permanent mold machines and associated small holding furnaces; and
- (13) barrel furnace.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22); and
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
- (e) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:
 - (1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.
 - (2) If the Part 70 permit has gone through final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.
 - (3) If the Part 70 permit has gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is

issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will issued after EPA review.

B.5 Phase Construction Time Frame

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the IDEM may revoke this approval to construct if the:

- (a) Construction of Phase 1 (#10 dry hearth furnace) has not begun within eighteen (18) months from the effective date of this approval or if during the construction of Phase 1, work is suspended for a continuous period of one (1) year or more.
- (b) Construction of Phase 2 (#13 dry hearth furnace) has not begun within eighteen (18) months after the operation of Phase 1 or if during the construction of Phase 2, work is suspended for a continuous period of one (1) year or more.
- (c) Construction of Phase 3 (#14 dry hearth furnace) has not begun within eighteen (18) months after the operation of Phase 2 or if during the construction of Phase 3, work is suspended for a continuous period of one (1) year or more.
- (d) Construction of Phase 4 (#18A reverberatory furnace) has not begun within eighteen (18) months after the operation of Phase 3 or if during the construction of Phase 4, work is suspended for a continuous period of one (1) year or more.

The OAQ may extend such time upon satisfactory showing that an extension, formally requested by the Permittee is justified.

SECTION C

GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance which is required by the PMPs shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two

(2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

Testing Requirements [326 IAC 2-7-6(1)]

C.8 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

- (a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.12 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)]
[326 IAC 2-7-6(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a temperature, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.13 Compliance Response Plan - Preparation, Implementation, Records, and Reports
[326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from, or a violation of, this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be

promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

- (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.14 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,
Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
 - (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
 - (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

**C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Chip Processing (existing unit)

- (e) One (1) aluminum chip dryer constructed in 1974, referred to as CHIP-2, with a maximum capacity of 5.85 tons of aluminum per hour and a maximum heat input capacity of 6.83 million Btu per hour, with emissions controlled by a baghouse and an afterburner AB-1 and exhausting to stack 10.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the aluminum chip dryer shall not exceed 13.39 pounds per hour when operating at a process weight rate of 5.85 tons of aluminum per hour. The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) The PM emissions from the chip dryer shall not exceed 2.28 pounds per ton of metal.
- (b) The PM₁₀ emissions from the chip dryer shall not exceed 2.28 pounds per ton of aluminum chips.
- (c) The VOC emissions from the chip dryer shall not exceed 2.0 pounds per ton of aluminum chips.

These limits are necessary in order that the source maintain minor PSD status; therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 will not apply to units constructed after 1977.

D.1.3 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the aluminum chip dryer except when otherwise specified in 40 CFR Part 63, Subpart RRR. These requirements become applicable to the aluminum chip dryer on March 24, 2003. This facility is an area source under Clean Air Act Section 112. Therefore, only the area source requirements of Subpart RRR apply to this facility.

D.1.4 Secondary Aluminum Smelting NESHAP Requirements [40 CFR Part 63 (Subpart RRR)]

- (a) Pursuant to 40 CFR 63.1505(c)(2), on or after the date the initial performance test is conducted or required to be conducted, whichever date is earlier, the owner or operator of the thermal chip dryer must not discharge or cause to be discharged to the atmosphere emissions in excess of 2.50 micrograms total polychlorinated dibenzofurans (D/F) international Toxicity Equivalent (TEQ) per megagram (3.5×10^{-5} gr per ton) of feed/charge.

- (b) Pursuant to 40 CFR 63.1506(f), the owner or operator of a thermal chip dryer with emissions controlled by an afterburner must:
 - (1) Maintain the 3-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test.
 - (2) Operate the afterburner in accordance with the OM&M plan.
 - (3) Operate each thermal chip dryer using only unpainted aluminum chips as the feedstock.

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the chip dryer, the baghouse, and the afterburner.

Compliance Determination Requirements

D.1.6 Control Device Operation

- (a) In order to comply with Conditions D.1.2 and D.1.4, the afterburner shall be in operation at all times when the thermal chip dryer is in operation.
- (b) In order to comply with Conditions D.1.1 and D.1.2, the baghouse shall be in operation at all times when the thermal chip dryer is in operation.

D.1.7 Testing Requirements [326 IAC 2-7-6(1),(6)]

- (a) Within 12 months after issuance of this permit, the Permittee shall perform PM, PM10, and VOC testing using methods as approved by the Commissioner, in order to demonstrate compliance with conditions D.1.1 and D.1.2. PM10 includes filterable and condensable PM10. These tests shall be repeated at least five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.
- (b) Within 180 days after March 24, 2003, the source shall conduct a performance test to demonstrate compliance with the requirements of 40 CFR 63, Subpart RRR as listed in Condition D.1.4(a). These tests shall be repeated at least five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing, and in accordance with the following requirements.
 - (1) Prior to conducting the performance test required by 40 CFR 63, Subpart RRR, the Permittee shall prepare and submit a site-specific test plan in compliance with 40 CFR 63.7(c). Following approval of the site-specific test plan, the Permittee shall demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected unit and report the results in the notification of compliance report. The Permittee shall conduct performance tests in accordance with the requirements in 40 CFR 63, Subpart A and 40 CFR 63, Subpart RRR. The Permittee shall use Method 23 in Appendix A to 40 CFR 60 or an alternative method approved by the Administrator to measure the concentration of D/F.

The Permittee shall notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test shall be provided at least 30 days before the observations are scheduled to take place [63.1511(a)].

- (2) The Permittee shall establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 that ensures compliance with the applicable emission limit for D/F. The Permittee may use existing data in addition to the results of the performance test to establish operating parameter values for compliance monitoring provided the requirements of 40 CFR 63.1511(g) are met [40 CFR 63.1511(g)].

D.1.8 Secondary Aluminum Smelting NESHAP Monitoring Requirements [40 CFR Part 63 (Subpart RRR)]

- (a) The Permittee shall prepare a written Operation, Maintenance, and Monitoring Plan and shall submit the plan to the applicable permitting authority for review and approval no later than March 24, 2003. Any subsequent changes to the plan shall be submitted to the applicable permitting authority for review and approval. Pending approval of the initial or amended plan, the Permittee shall comply with the conditions of the submitted plan. The plan shall include the following information [63.1510(b)]:
 - (1) The process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each affected unit and control device.
 - (2) A monitoring schedule for each affected unit.
 - (3) Procedures for the proper operation and maintenance of each affected unit and control device used to meet the applicable emission limit in 40 CFR 63.1505.
 - (4) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
 - (A) Calibration and certification of accuracy of each monitoring device, at least once every six (6) months, according to the manufacturer's instructions; and
 - (B) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in 40 CFR 63, Subpart A.
 - (5) Procedures for monitoring process and control parameters, including procedures for annual inspections of afterburners, and if applicable, the procedures to be used for determining feed (or throughput) weight if a measurement device is not used.
 - (6) Corrective actions to be taken when process operating parameters or add-on control device parameters deviate from the value or range established in (A) above, including:
 - (A) Procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and
 - (B) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time and date corrective action was completed.

- (7) A maintenance schedule for each affected unit and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

The completion of the initial performance tests for the secondary aluminum processing units shall be considered to be the date of approval of the Operation, Maintenance and Monitoring Plan by IDEM, OAQ [63.1506(a)(2)].

- (b) The Permittee must monitor the afterburner as follows:

- (1) The Permittee must install, calibrate, maintain, and operate a device to continuously monitor and record the operating temperature of the afterburner consistent with the requirements for continuous monitoring systems in 40 CFR 63, Subpart A.
- (2) The temperature monitoring device must:
- (i) Be installed at the exit of each afterburner's combustion zone.
 - (ii) Record the temperature in 15-minute block averages and determine and record the average temperature for each 3-hour block period.
 - (iii) Have a recorder response range including zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(m).
 - (iv) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.
- (3) Conduct an inspection of each afterburner at least once a year and record the results. At a minimum, an inspection must include:
- (i) Inspection of all burners, pilot assemblies, and pilot sensing devices for proper operation and clean pilot sensor;
 - (ii) Inspection for proper adjustment of combustion air;
 - (iii) Inspection of internal structures (e.g., baffles) to ensure structural integrity;
 - (iv) Inspection of dampers, fans, and blowers for proper operation;
 - (v) Inspection for proper sealing;
 - (vi) Inspection of motors for proper operation;
 - (vii) Inspection of combustion chamber refractory lining and clean and replace lining as necessary;
 - (viii) Inspection of afterburner shell for corrosion and/or hot spots;
 - (ix) Documentation verifying that, for the burn cycle following the inspection, the afterburner is operating properly and all necessary adjustments have been made;

- (x) Verification that the equipment is maintained in good operating condition.
- (xi) Following an equipment inspection, all necessary repairs must be completed in accordance with the requirements of the OM&M plan.
- (c) The Permittee shall develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the emission limit. The Permittee shall keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during startup, shutdown, or malfunction is not consistent with the procedures in the startup, shutdown, and malfunction plan. The plan shall include [63.1516(a)].
 - (1) The procedures to determine and record the cause of a malfunction and the time the malfunction began and ended; and
 - (2) Corrective actions to be taken in the event of a malfunction of a process or control device, including the actions taken to correct the malfunction or minimize emissions.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.9 Visible Emissions Notations

- (a) Visible emission notations of the chip dryer stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.1.10 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse controlling the thermal chip dryer at least once per shift when the thermal chip dryer is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 to 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instruments used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.11 Broken or Failed Bag Detection

In the event that bag failure has been observed, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions), or if safety concerns prevent immediate shutdown. If safety concerns prevent immediate shutdown, then feed to the associated process will be shut off immediately and the process shall be shutdown as soon as shutdown would be considered safe.

D.1.12 Baghouse Inspections

An inspection shall be performed each calendar quarter of the clean end of the thermal chip dryer baghouse. If the inspection indicates that there are defective bags, the defective bags shall be replaced.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.13 Record Keeping Requirements [40 CFR 63, Subpart RRR] [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- (a) To document compliance with Condition D.1.9, the Permittee shall maintain records of visible emission notations of the chip dryer stack exhaust once per shift.
- (b) In order to document compliance with condition D.1.10, the Permittee shall maintain records of the total static pressure drop once per shift during normal operation when venting to the atmosphere.
- (c) In order to document compliance with Condition D.1.12, the Permittee shall maintain records of the results of the inspections required under Condition D.1.12.
- (d) Pursuant to 40 CFR 63, Subpart RRR, in addition to the general records required by 40 CFR 63.10(b), the Permittee shall maintain:
 - (1) The number of total operating hours for the affected source or emission unit during each 6 month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.
 - (2) Records of any approved alternative monitoring or test procedure.
 - (3) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
 - (i) Startup, shutdown, and malfunction plan; and
 - (ii) Operation, Maintenance, and Monitoring Plan.

The record keeping requirements pursuant to the NESHAP 40 CFR 63, Subpart RRR, become applicable to the aluminum chip dryer on March 24, 2003.

- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.14 Reporting Requirements [40 CFR 63, Subpart RRR]

- (a) Pursuant to 40 CFR 63.1515(b), the Permittee shall submit a notification of compliance status reports no more than 60 days after March 24, 2003 for the thermal chip dryer. The notification must be signed by the responsible official who must certify its accuracy. The report shall include:
- (1) All information required in 40 CFR 63.9(h). The Permittee shall provide a complete performance test report for each affected unit, including data, associated measurements, and calculations.
 - (2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system.
 - (3) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., alkaline agent injection rate, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.
 - (4) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for the capture/collection system required in 40 CFR 63.1506(c).
 - (5) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems required in 40 CFR 63.1510(f).
 - (6) Approved Operation, Maintenance, and Monitoring Plan.
 - (7) Startup, shutdown, and malfunction plan.
- (b) On and after March 24, 2003, the Permittee shall submit a semi-annual report within 60 days after the end of each six (6) month period detailing all deviations from the Operation, Maintenance, and Monitoring Plan. When no deviations have occurred, the Permittee shall submit a report stating that no excess emissions occurred during the reporting period. A report shall be submitted if any following conditions occur [63.1516(b)]:
- (1) An excursion of a compliant process or operating parameter value or range.
 - (2) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan.
 - (3) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.
- The Permittee shall submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.
- (4) The Permittee shall maintain files of all information, including reports and notifications, required by 40 CFR 63.10 and 40 CFR 63.1517. The Permittee

shall retain each record for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent two (2) years of records shall be retained at the source. The remaining three (3) years of records may be retained off-site. The Permittee may retain records on microfilm, computer disks, magnetic tape or microfiche.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Aluminum Crushing (existing unit)

- (f) One (1) scrap metal crusher device, referred to as CRUSH, constructed in 1974 with a maximum crushing capacity of 37.5 tons of aluminum scrap per hour, with emissions controlled by a dust collector and exhausting to stack CRUSH-1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the scrap metal crusher shall not exceed 41.94 pounds per hour when operating at a process weight rate of 37.5 tons of aluminum per hour. The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate greater than 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.2.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) The PM emissions from the scrap metal crusher shall not exceed 0.235 pounds per hour.
- (b) The PM₁₀ emissions from the scrap metal crusher shall not exceed 0.235 pounds per hour.

These limits are necessary in order that the source maintain minor PSD status; therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 will not apply to units constructed after 1977.

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the scrap metal crusher and the dust collector.

Compliance Determination Requirements

D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

Within 12 months after issuance of this permit, the Permittee shall perform PM and PM₁₀ testing using methods as approved by the Commissioner, in order to demonstrate compliance with conditions D.2.1 and D.2.2. PM₁₀ includes filterable and condensable PM₁₀. This test shall be repeated at least five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.2.5 Particulate Matter (PM)

In order to comply with Conditions D.2.1 and D.2.1, the dust collector shall be in operation at all times when the scrap metal crusher is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.6 Visible Emissions Notations

- (a) Visible emission notations of the scrap metal crusher stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.2.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the dust collector controlling the scrap metal crusher at least once per shift when the scrap metal crusher is in operation. When for any one reading, the pressure drop across the dust collector is outside the normal range of 1.0 to 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instruments used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.8 Dust Collector Inspections

An inspection shall be performed each calendar quarter of the clean end of the scrap metal crusher dust collector. If the inspection indicates there could be a defective cartridge filter, all defective filters shall be replaced.

D.2.9 Broken or Failed Cartridge Filter Detection

In the event that a cartridge filter failure has been observed, failed units and the associated process shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section C- Emergency Provisions), or if safety concerns prevent immediate shutdown. If safety concerns prevent immediate shutdown, then feed to the associated process shall be shut off immediately and the process shall be shutdown as soon as shutdown would be considered safe.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.10 Record Keeping Requirements

- (a) In order to document compliance with Condition D.2.6, the Permittee shall maintain records of visible emission notations of the dust collector stack exhaust once per shift.
- (b) In order to document compliance with condition D.2.7, the Permittee shall maintain records of the total static pressure drop once per shift during normal operation when venting to the atmosphere.
- (c) In order to document compliance with Condition D.2.8, the Permittee shall maintain records of the results of the inspections required under Condition D.2.8.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

New Units

- (a) One (1) new dry hearth furnace, identified as number 10, with a maximum heat input capacity of 50 million British thermal units per hour and a maximum melt rate of 12.5 tons of aluminum per hour, with emissions uncontrolled and exhausting to stacks DH-10-1, DH-10-2, and DH-10-3.
- (b) One (1) new dry hearth furnace, identified as number 13, with a maximum heat input capacity of 10 million British thermal units per hour and a maximum capacity of 2.08 tons of aluminum per hour and one (1) pound of inorganic flux per ton of metal, with emissions uncontrolled and exhausting to stack DH-13-1.
- (c) One (1) new dry hearth furnace, identified as number 14, with a maximum heat input capacity of 10 million British thermal units per hour and a maximum capacity of 2.08 tons of aluminum per hour and one (1) pound of inorganic flux per ton of metal, with emissions uncontrolled and exhausting to stack DH-14-1.
- (d) One (1) new reverberatory furnace, identified as number 18A, with a maximum heat input capacity of 7 million British thermal units per hour and a maximum capacity of 2.0 tons of aluminum per hour, nine (9) pounds of inorganic flux per ton of metal, and two (2) pounds of organic flux per ton of metal, with emissions uncontrolled and exhausting to stacks 261 and 264.

Die Cast Melting (existing unit)

- (g) Two (2) electric induction furnaces, referred to as INDUCT-21, and INDUCT-22, constructed in 1977, each with a maximum capacity of 3.3 tons of aluminum per hour, controlled by a common venturi scrubber system VS-1 and exhausting to stack 14.
- (h) Three (3) electric induction furnaces, referred to as INDUCT-23, INDUCT-24, and INDUCT-25, constructed in 1981, each with a maximum capacity of 3.3 tons of aluminum per hour, controlled by a common venturi scrubber system VS-2 and exhausting to stack 15.
- (i) Two (2) electric induction furnaces, referred to as INDUCT-26 and INDUCT-27, both constructed in 1981, each with a maximum capacity of 3.3 tons of aluminum per hour, controlled by a common venturi scrubber system VS-3 and exhausting to stack 16.
- (j) One reverberatory holding furnace referred to as RF-2 and as DC MELT B - #2, constructed in 1999 with a maximum capacity of 6.25 tons of metal per hour and 0.1 pounds of inorganic flux per ton of metal, and a maximum heat input capacity of 25 million Btu per hour, with emissions uncontrolled and exhausting to stack 207.
- (k) One reverberatory melting furnace referred to as RF-3 and as DC MELT A - #3, constructed in 1974 with a maximum capacity of 3.4 tons of metal per hour and 7 pounds of inorganic flux per ton of metal, and a maximum heat input capacity of 20.4 million Btu per hour, with emissions uncontrolled and exhausting to stacks 67 and 68.
- (l) One reverberatory furnace referred to as RF-11 and as DC MELT A - #11, constructed in 1974 with a maximum capacity of 5.1 tons of metal per hour and 7 pounds of inorganic flux per ton of metal, and a maximum heat input capacity of 20.4 million Btu per hour, with emissions uncontrolled and exhausting to stacks 55, 56, and RF-11-H5.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

SECTION D.3

FACILITY OPERATION CONDITIONS (Continued)

Facility Description [326 IAC 2-7-5(15)] (continued)

Die Cast Melting (existing units)

- (m) One reverberatory melting furnace referred to as RF-12 and as DC MELT A - #12, constructed in 1996 with a maximum capacity of 10.0 tons of metal per hour and 7 pounds of inorganic flux per ton of metal and a maximum heat input capacity of 40.0 million Btu per hour, with emissions uncontrolled and exhausting to stacks 57, 58, and 17.
- (n) One reverberatory melting furnace referred to as RF-16 and as DC MELT A - #16, constructed in 1975 with a maximum capacity of 4.87 tons of metal per hour and 7 pounds of inorganic flux per ton of metal, and a maximum heat input capacity of 29.2 million Btu per hour, with emissions uncontrolled and exhausting to stacks 52, 53, and 16.

Piston Melting

- (o) One reverberatory melting furnace referred to as RF-13 and as PIST MELT - #13, constructed in 1996, with a maximum capacity of 1.08 tons of metal per hour and a maximum heat input capacity of 5.2 million Btu per hour, with emissions uncontrolled and exhausting to stack 294.
- (p) One reverberatory melting furnace referred to as RF-5 and as PIST MELT - #5, constructed in 1977 with a maximum capacity of 4.17 tons of metal per hour, 9 pounds of inorganic flux per ton of metal, 2 pounds of organic flux per ton of metal, and a maximum heat input capacity of 25 million Btu per hour, with emissions uncontrolled and exhausting to stacks 283 and 284.
- (q) One reverberatory melting furnace complex referred to as complex 6 and RF-6, consisting of two natural gas-fired reverberatory furnaces, constructed in 1999, with a maximum capacity of 5 tons of metal per hour and 0.1 pounds of inorganic flux per ton of metal, and with a combined maximum heat input capacity of 33 million Btu per hour, with emissions uncontrolled and exhausting to stacks 6-1, 6-3, and charge well stacks 6-2 and 6-4.
- (r) One reverberatory melting furnace referred to as RF-7 and as PIST MELT - #7, constructed in 1976 with a maximum capacity of 6.6 tons of metal per hour, 9 pounds of inorganic flux per ton of metal, 2 pounds of organic flux per ton of metal, and a maximum heat input capacity of 39.6 million Btu per hour, with emissions uncontrolled and exhausting to stacks 275 and 276;
- (s) One reverberatory melting furnace referred to as RF-17 and as PIST MELT - #17, constructed in 1977 with a maximum capacity of 4.3 tons of metal per hour, 9 pounds of inorganic flux per ton of metal, 2 pounds of organic flux per ton of metal, and a maximum heat input capacity of 25.8 million Btu per hour, with emissions uncontrolled and exhausting to stacks 263 and 260.
- (t) One reverberatory melting furnace referred to as RF-19 and as PIST MELT - #19, constructed in 1978 with a maximum capacity of 4.67 tons of metal per hour, 9 pounds of inorganic flux per ton of metal, 2 pounds of organic flux per ton of metal, and a maximum heat input capacity of 28 million Btu per hour, with emissions uncontrolled and exhausting to stacks 287 and 288.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the following conditions shall apply:

- (a) The particulate matter (PM) from the #10 dry hearth furnace shall not exceed 22.27 pounds per hour when operating at a process weight rate of 12.5 tons of aluminum per hour.
- (b) The particulate matter (PM) from the #13 dry hearth furnace shall not exceed 6.70 pounds per hour when operating at a process weight rate of 2.08 tons of aluminum per hour.
- (c) The particulate matter (PM) from the #14 dry hearth furnace shall not exceed 6.70 pounds per hour when operating at a process weight rate of 2.08 tons of aluminum per hour.
- (d) The particulate matter (PM) from the #18A reverberatory furnace shall not exceed 6.52 pounds per hour when operating at a process weight rate of 2.0 tons of aluminum per hour.
- (e) The particulate matter (PM) from each of the electric induction furnaces shall not exceed 9.12 pounds per hour when operating at a process weight rate of 3.3 tons of aluminum per hour each.
- (f) The particulate matter (PM) from the #2 reverberatory furnace shall not exceed 14.0 pounds per hour when operating at a process weight rate of 6.25 tons of aluminum per hour.
- (g) The particulate matter (PM) from the #3 reverberatory furnace shall not exceed 9.31 pounds per hour when operating at a process weight rate of 3.4 tons of aluminum per hour.
- (h) The particulate matter (PM) from the #11 reverberatory furnace shall not exceed 12.21 pounds per hour when operating at a process weight rate of 5.1 tons of aluminum per hour.
- (i) The particulate matter (PM) from the #12 reverberatory furnace shall not exceed 19.18 pounds per hour when operating at a process weight rate of 10 tons of aluminum per hour.
- (j) The particulate matter (PM) from the #16 reverberatory furnace shall not exceed 11.84 pounds per hour when operating at a process weight rate of 4.87 tons of aluminum per hour.
- (k) The particulate matter (PM) from the #5 reverberatory furnace shall not exceed 10.67 pounds per hour when operating at a process weight rate of 4.17 tons of aluminum per hour.
- (l) The particulate matter (PM) from the #6C reverberatory furnace shall not exceed 12.05 pounds per hour when operating at a process weight rate of 5.0 tons of aluminum per hour.
- (m) The particulate matter (PM) from the #7 reverberatory furnace shall not exceed 14.52 pounds per hour when operating at a process weight rate of 6.6 tons of aluminum per hour.
- (n) The particulate matter (PM) from the #17 reverberatory furnace shall not exceed 10.89 pounds per hour when operating at a process weight rate of 4.3 tons of aluminum per hour.
- (o) The particulate matter (PM) from the #19 reverberatory furnace shall not exceed 11.51 pounds per hour when operating at a process weight rate of 4.67 tons of aluminum per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.3.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

The source shall comply with conditions (a), (b), (c), (d), and (j) in order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the dry hearth furnaces #10, 13, and 14 and reverberatory furnace #18A, and in order for the source to maintain minor PSD status. The source shall comply with conditions (a), (d), (e), (f), (g), (h), and (i) in order to limit the potential to emit of any single HAP to less than 10 tons per year and any combination of HAPs to less than 25 tons per year, such that the source will be a minor source of HAPs.

- (a) The total amount of metal melted by all the furnaces combined shall not exceed 175,000 tons per 12 consecutive month period.
- (b) The PM emissions from each of the furnaces shall not exceed 1.78 pounds per ton of metal melted averaged over the melt cycle.
- (c) The PM10 emissions from each of the furnaces shall not exceed 1.78 pounds per ton of metal melted averaged over the melt cycle.
- (d) The amount of organic flux used in all of the furnaces combined shall not exceed 34,909 pounds per 12 consecutive month period, where 100 pounds of inorganic flux is equivalent to 1 pound of organic flux.
- (e) The HCl emissions from the use of organic flux shall not exceed 0.55 pounds per pound of organic flux used.
- (f) The HF emissions from the use of organic flux shall not exceed 0.03 pounds per pound of organic flux used.
- (g) The hexachloroethane emissions from the use of organic flux shall not exceed 0.41 pounds per pound of organic flux used.
- (h) The HCl emissions from the use of inorganic flux shall not exceed 0.005 pounds per pound of inorganic flux used.
- (i) The HF emissions from the use of inorganic flux shall not exceed 0.02 pounds per pound of inorganic flux used.
- (j) The Permittee shall not melt any post-consumer scrap materials in any of the furnaces at this source. Only in-house returns and/or in-house returns from other sources where the composition of the purchased returns have at least the same quality as the source's own in-house returns shall be melted in any of the furnaces. The other source's returns shall be specified contractually, and the quality of the returns shall be controlled contractually. Therefore, this source is not considered a secondary metal production facility and is therefore, not one of the 28 listed source categories.

These limits are necessary in order that the source maintain minor PSD status; therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 will not apply to units constructed after 1977. These conditions are also sufficient to limit emissions of HAPs to less than 10 tons per year for any single HAP and less than 25 tons per year for all HAPs combined.

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

Compliance Determination Requirements

D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

- (a) Within 60 days after achieving maximum capacity, but no later than 180 days after startup, the Permittee shall perform PM and PM10 testing on the dry hearth furnace #10 using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.3.1 and D.3.2. PM10 includes filterable and condensible PM10. This test shall be repeated at least five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.
- (b) Within 12 months after issuance of this permit, the Permittee shall perform PM and PM10 testing on the reverberatory furnaces #2 and #6C using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.3.1 and D.3.2. PM10 includes filterable and condensible PM10. This test shall be repeated at least five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.
- (c) Within 12 months after issuance of this permit, the Permittee shall cease operations of all electric induction furnaces or perform PM and PM10 testing on one of the electric induction furnaces using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.3.1 and D.3.2. PM10 includes filterable and condensible PM10. This test shall be repeated at least five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.5 Record Keeping Requirements

- (a) To document compliance with Condition D.3.2, the Permittee shall keep records of the amount of metal melted in all of the furnaces combined, each month of operation.
- (b) To document compliance with Condition D.3.2, the Permittee shall keep records of the amount of organic flux used in all of the furnaces combined, each month of operation.
- (c) To document compliance with Condition D.3.2, the Permittee shall keep records of the amount of inorganic flux used in all of the furnaces combined, each month of operation.
- (d) To document compliance with Condition D.3.2(j), the Permittee shall keep records of the type of scrap used in the furnaces. The records shall be sufficient to demonstrate compliance with the requirements of D.3.2(j).
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.6 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.2 shall be submitted to the address in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the

quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.4

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Piston Melting (existing unit)

- (u) One (1) natural gas-fired boiler referred to as the POWER - tool room boiler, constructed in 1966 with a maximum heat input capacity of 10.05 million Btu per hour with emissions uncontrolled and exhausting to stack 30 which has a height of 50 feet.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate Matter (PM)

Pursuant to 326 IAC 6-2-3 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from the 10.05 MMBtu per hour heat input boiler shall be limited to 0.8 pound per million Btu of heat input.

This limitation is based on the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

where C = Maximum ground level concentration with respect to distance from the point source at the "critical" wind speed for level terrain. This shall equal 50 micrograms per cubic meter for a period not to exceed a sixty (60) minute time period.

Pt = Pounds of particulate matter emitted per million Btu heat input (lb/MMBtu).

Q = Total source maximum operating capacity rating in million Btu per hour of heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

N = Number of stacks in fuel burning operation.

a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 MMBtu/hr heat input. The value 0.8 shall be used for Q greater than 1,000 MMBtu/hr heat input.

h = Stack height in feet. If a number of stacks of different heights exist, the average stack height to represent "N" stacks shall be calculated by weighing each stack height with its particulate matter emissions rate.

SECTION D.5

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Insignificant Activities

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment:
 - (1) grinding and machining operations;
 - (2) chip and crushed material storage piles;
 - (3) sniff units;
 - (4) EDM carbon etchers, tool sharpening, and abrasive cleaning;
 - (5) small sand blasters;
 - (6) refractory powder mixing station;
 - (7) clipper brick saw;
 - (8) feed hopper and conveyor for induction furnaces;
 - (9) dross presses;
 - (10) ladle weigh station;
 - (11) die cast machines and associated small holding furnaces;
 - (12) permanent mold machines and associated small holding furnaces; and
 - (13) barrel furnace.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Degreasing operations

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;

- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.5.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.

- (C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Process Weight Activities

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.3 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each of the particulate emitting facilities listed in this section shall not exceed the allowable PM emission rate based on the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: General Motors Corporation - GMPTG - Bedford
Source Address: 105 GM Drive, Bedford, Indiana 47421
Mailing Address: P.O. Box 271, Bedford, Indiana 47421
Source Modification No.: 093-13639-00007

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

- ? Test Result (specify) _____
- ? Report (specify) _____
- ? Notification (specify) _____
- ? Affidavit (specify) _____
- ? Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: General Motors Corporation - GMPTG - Bedford
Source Address: 105 GM Drive, Bedford, Indiana 47421
Mailing Address: P.O. Box 271, Bedford, Indiana 47421
Source Modification No.: 093-13639-00007
Facilities: All furnaces
Parameter: The amount of metal melted in all furnaces combined
Limit: 175,000 tons of metal melted in all furnaces combined, per 12 consecutive month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

? No deviation occurred in this quarter.

? Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

A certification by the "responsible official" as defined by 326 IAC 2-7-1(34) is required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: General Motors Corporation - GMPTG - Bedford
Source Address: 105 GM Drive, Bedford, Indiana 47421
Mailing Address: P.O. Box 271, Bedford, Indiana 47421
Source Modification No.: 093-13639-00007
Facilities: All furnaces
Parameter: The amount of flux used in all furnaces combined
Limit: 34,909 pounds of organic flux used in all furnaces combined, per
12 consecutive month period, where 100 pounds of inorganic flux is
equivalent to 1 pound of organic flux

YEAR: _____

Month	Column 1			Column 2			Column 1 + Column 2		
	This Month			Previous 11 Months			12 Month Total		
	organic flux used (lbs)	inorganic flux used (lbs)	total equivalent organic flux usage (lbs)	organic flux used (lbs)	inorganic flux used (lbs)	total equivalent organic flux usage (lbs)	organic flux used (lbs)	inorganic flux used (lbs)	total equivalent organic flux usage (lbs)
Month 1									
Month 2									
Month 3									

? No deviation occurred in this quarter.

? Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

General Motors Corporation -
GMPTG - Bedford
Bedford, Indiana
Permit Reviewer: Nisha Sizemore

1st Amendment No. 093-17902-00007
Modified by: Mike Pring

Page 44 of 44
Source Modification No. 093-13639-00007

A certification by the "responsible official" as defined by 326 IAC 2-7-1(34) is required for this report.